

## ABSTRACT OF THE DISCLOSURE

A method for allocating an frequency band to a wireless communication system, comprising the steps of: detecting frequencies being used by the other wireless systems to search an idle frequency band adapted to a new occupied band to be allocated from among idle frequency bands; deciding a main frequency of the occupied band within the detected idle frequency band; and repeating the detection of the idle frequency band and the decision of the main frequency for the occupied band with a reduced width when there is no idle frequency band adapted to the occupied band and if the width of the occupied band to be set is changeable.